

**ABSTRACT**

A seeding apparatus comprising: (a) seed distribution metering device including a rotating drum with apertures on its periphery and a vacuum generator for generating a suction pressure inside the drum so that seeds are attracted to the apertures; (b) feeding system including a hopper, gravitational acceleration chamber, velocity controlling elements such as a flap and continuous belts for feeding seeds at a required amount and speed to the drum; (c) release mechanisms including an air-jet for releasing metered seeds from the drum along a selected trajectory while unselected seeds follow another trajectory, delivery device including an adjustable flow venturi and electronic sensor for controlling delivery of metered seeds.